

Advances in the Technique of Rectification

SOV/63-3-6-6/43

vened by the industry of synthetic alcohol are published in [Ref. 122]. Mixtures of organic compounds have a wide range of boiling points. The effect of separating agents is discussed in [Ref. 131].

There are 3 graphs and 140 references, 63 of which are Soviet, 58 English, 6 American, 6 French, 4 German, 1 Canadian, 1 Polish, and 1 Czechoslovakian.

Card 3/3

Advances in the Technique of Rectification

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plates in the columns increase the output 2 - 3 times and improve the quality of separation [Ref. 45]. In two patents [Ref. 55, 56] different modifications of the slits in the plates are dealt with. Film columns consisting of pipes with 4 - 6 mm in diameter as well as columns with plane-parallel inserts are now of great interest. Most efficient are inserts made of fabrics and sheet iron [Ref. 59] which have a hydraulic resistance 50 - 60 times lower than ring inserts. The rectification of an alcohol-water mixture is investigated in [Ref. 61]. It has been shown that in pipes of 8 - 20 mm in diameter an emulsification condition may be reached. For vacuum rectification columns with regular inserts are regarded most efficient. A column with spiral insert made of sheet metal is described in [Ref. 73]. These columns are used for the rectification of organic silicon compounds. A 37-stage laboratory apparatus used for the continuous separation of thermally instable organic compounds is described in [Ref. 87]. Rectification methods are applied for the separation of stable isotopes of hydrogen, helium, lithium, boron, etc. A light isotope of helium, He^3 , may be obtained by the rectification of liquid helium [Ref. 107, 108]. The separation of cracking gases in the USA is described in [Ref. 120, 121]. The results of a scientific technical conference in Ufa in May 1958 con-

Card 2/3

MALYUSOV, V.A

SOV/7-1-5-1/10

AUTHORS: Aerov, M.E., Doctor of Technical Sciences, Mal, Aerov, V.A., Candidate of Technical Sciences

TITLE: Advances in the Technique of Rectification (Novoye v tekhnike rektifikatsii)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1958, Vol III, Nr 6, pp 736-745 (USSR)

ABSTRACT: The publications of the recent 1 - 1.5 years on rectification are discussed here. The number and size of plates in rectification columns used for the separation of binary systems is now determined graphically [Ref. 1]. The rectification of multi-compound systems may be calculated by means of a computer [Ref. 7]. Figures 1 and 2 show the results of such calculations for a de-ethanizer. Rectification columns with bubbling plates are the types mostly used now. The hydraulics and the mass exchange in the grid-plates of these columns are investigated in [Ref. 19]. Designing and operation experience of columns with more than 50 plates used for the production of pure isobutylene, ethylene, benzene, xylene, etc is published in [Ref. 31]. Grid

1/3

Investigation and Calculation of Absorption and
Rectifying Columns With Regular Filling Material

SOV/156-58-1-45/46

on the top packing. The main advantage of the filling material, its low hydraulic resistance, is illustrated in figure 3. The maximum load of the regular filling bodies can be computed from the graph, figure 5. Table 2 gives some rectification results obtained with the columns described. All experiments were made at pseudo-turbulent conditions ($Re_r = 500 - 2000$). For these, the height that would be equivalent to the theoretical plate was found to be almost independent of the load. For individual cases where the concentration of the component to be extracted is small (as, for instance, in producing the heavy oxygen and hydrogen isotopes) the use of the column will in fact permit installation of a multistage rectification. The condenser of the preceding column is used as an evaporating still for the next column whereby much steam is saved. The capacity of these columns was studied for the absorption of CO_2 , and NH_4 respectively, in water, and of NH_4 in HCl (Refs 9,10). From this the partition coefficients in the liquid and gaseous phases could be determined. By studying packings of filling material of

Card 2/3

AUTHORS:

Zhavoronkov, N. M., Malyusov, V. A.

SOV/156-58-1-45/46

TITLE:

Investigation and Calculation of Absorption and Rectifying Columns With Regular Filling Material (Issledovaniye i raschet absorbtionnykh i rektifikatsionnykh kolonn s regul'yarnoy nasadkoy)

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 185 - 192 (USSR)

ABSTRACT:

As is well known, the columns mentioned in the title have as a feature a high throughput rate and a low hydraulic resistance. Their investigation, as well as the development of an economical design, would therefore be of great practical interest. A survey of literature is given (Refs 1-5). In cooperation with Malofeyev, Umnik, Babkov and Uvarov (Refs 6-10) the authors have concerned themselves with designing distribution equipment of low hydraulic resistance. Among this equipment, 4 types (and 3 subtypes) of vertical columns were studied (Figs 1a - g). Figure 2 gives the schematic design of a column (500 mm diam., 18 m height) filled with packings of sheet filling material. In order that all sheets may be moistened, special grate distributors were arranged

Card 1/3

Scientific Conference at the Institute for Physical
Chemistry Imeni L. Ya. Karpov.

64-1-18/19

M. I. Temkin and L. E. Apel'baum on the chain characteristics
of heterogeneous catalytic reactions and professor G. K. Boreskov
reported on: "Some Questions of Catalyst Selection."
There are no references.

AVAILABLE: Library of Congress.

1. Chemical research-USSR
2. Scientific research-USSR

Card 3/3

Scientific Conference at the Institute for Physical
Chemistry Imeni L. Ya. Karpov

64-1-18/19

reported on peroxide compounds of the alkaline metals, professor A. I. Shtenshteyn on the isotopic reactions with deuterium in anhydrous solutions, professor P. P. Shorygin on the interaction of the substituents in molecules of organic compounds, D. N. Shirogin on the nature and effect of the hydrogen- and metal element binding, professor B. F. Ormont on the importance of the solid phases, professor G. S. Zhdanov reported on the work of the electronic computing machine "Kristall" and demonstrated it. V. L. Karpov reported on the investigations of the radiation stability of high polymers, professor V. I. Veselovskiy on the mechanism of the radiation-electrochemical processes, professor M. A. Proskurnin on the sensitization of radiation-chemical reactions, professor S. Ya. Pshezhetskiy on the oxidation of nitrogen under ionizing radiations, professor N. N. Tunitskiy on the molecule- and ionic dissociation in the mass spectrometer, A. Kh. Breger on sources of nuclear radiations, professor Ya. M. Kolotyркиn on electrochemical investigations of metals, the corresponding member of the AN USSR professor N. M. Zhavoronkov reported on the process of steady and unsteady mass transport in the absorption and rectification, professor

Card 2/3

AUTHOR: Malyusov, V. A.

64-1-18/19

TITLE: Scientific Conference at the Institute for Physical Chemistry Imeni L. Ya. Karpov
(Nauchnaya konferentsiya v Fiziko-khimicheskom institute imeni L. Ya. Karpova)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 56-56 (USSR).

ABSTRACT: At the end of November, 1957, a meeting of the scientific session of the scientific council took place in the above mentioned institute in honour of the 40th anniversary of the great socialist October Revolution. 19 contributions of the most interesting works carried out of lately in this institute were delivered. The corresponding member of the AN USSR, professor S. S. Medvedev, gave a report on the investigations of the general rules governing the emulsion polymerization. The active member of the AN USSR, professor V. A. Kargin reported on new observations in structural polymers. The corresponding member of the AN USSR, professor K. A. Kocheshkova reported on investigations in the field of organic lithium compounds. The corresponding member of the AN USSR, N. A. Kazarnovskiy,

Card 1/3

Investigations of the Distillation Process in a Molecular
Still of the Centrifugal Type

64-1-7/19

computation of the distillation velocity. The formula according to Burrows (reference 12) is used, whereby a satisfactory agreement is obtained. Investigations of the distribution effect showed that at increased temperature the output of the apparatus decreases which seems to be due to the increased vaporization velocity and the diffusion of the more volatile EGF from the liquid centre. The output amounts e. g. to 0,75 at 134°C. The distillation velocity is computed according to a modified computation formula of Carman (reference 14), whereby the influence of inert gases is taken into account. It was found that an improvement of the distillation process is obtained by the reduction of the vacuum, since the splashing of the distillate is reduced as well. Some formulae for the practical computations of the apparatus of the centrifugal type are given. There are 9 figures, and 15 references, 7 of which are Slavic.

AVAILABLE: Library of Congress.

Card 2/2

1. Molecular distilling plants-Centrifugal-Test results
2. Distilling plants-Test results 3. Distilling plants-Laboratory

~~MA~~ MALYUSOV, V. A.

AUTHORS: Malyusov, V. A., Malofeyev, N. A., Zhavoronkov, N. K. 64-1-7/19

TITLE: Investigations of the Distillation Process in a Molecular Still of the Centrifugal Type
(Issledovaniye protsessa distillyatsii v molekulyarnom kube tsentrobezhnogo tipa)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 31-36 (USSR).

ABSTRACT: Investigations were carried out in a laboratory molecular centrifugal distilling still with a conical rotor. A mixture of di-2-ethylhexyl-phthalate (EGF) and di-2-ethylhexylsebacinate (EGS) was used. The distribution coefficient of the mixture is independent of the composition in the case of a nonequilibrium vaporization and depends only on temperature. The investigations of the temperature influence and of the charging on the distillation temperature have shown that in the last case at temperatures up to 125°C somewhat higher results are obtained than were expected according to the computation. This is assumed to be due to a splashing of the liquid on the rotor during the distillation, and not to faulty design. The thereby produced error is given with approximately 0,2 and a correcting formula is given for the

Card 1/2

Mass Exchange in Thin Liquid Films

20-4-36/52

ASSOCIATION: Scientific Institute for Physical-Chemical Research
imeni L. Ya. Karpov (Nauchno-issledovatel'skiy fiziko-khimichesdy
institut im. L. Ya. Karpova).

SUBMITTED: July 3, 1957

AVAILABLE: Library of Congress

Card 4/4

Mass Exchange in Thin Liquid Films

20-4-36/52

rising and falling liquid current. In the first case the amplitude varies from 0,86 to 0,48, in the last case it is constant and amounts to 0,46. With both directions of the current it is independent of the current speed. Figure 4A shows experimental results on the dependence of the absorption coefficients of CO_2 by water on the wave length and on the amplitude of the rising and falling current. The coefficients of the mass exchange are dependent on the wave length and the amplitude. The data on the mass exchange can be placed satisfactorily within a curve if it is assumed that the mass exchange coefficients are proportional to the square of the amplitudes with any (fixed) value of the wave length. Finally the possibilities of calculating the CO_2 absorption coefficient by water, the wave length, and the thickness of the liquid film, are given. There are 4 figures, 1 table, and 11 references, 9 of which are Slavic.

Card 3/4

Mass Exchange in Thin Liquid Films

20-4-36/52

hardly soluble gases in a filmy ("plenochnyy") current only depends on the conditions of the formation of waves, especially on the length of the waves λ and on their amplitude ("amplituda"). The wave length was experimentally stated means of 2 methods: 1) by direct light absorption of the liquid current in the tube, and 2) by light absorptions from the oscillograph. In this last case the flowing liquid film connected a circuit that included a source of current and a constant resistance of 50 000 ohms. The alternating component ("peremennaya sostavlyashchaya") of the voltage that had arisen because of the changes of the thickness of the liquid layer, was transferred to the entrance of the oscillograph by the constant resistance. Table 1 shows the results of the experimental determinations of the wave length. Two equations, for rising and for falling liquids, are given. The first is exact enough as the correspondance of the results obtained by experiments to those obtained by calculation is satisfactory. For the determination of the amplitude ("amplituda") of the wave profile the electric resistance of the liquid film, dependent on its surface curvature, was used. Figure 3 shows the results of the measuring of the amplitude dependent on the gas speed in

Card 2/4

MALYUSOV, V. A.

20-4-36/52

AUTHORS: Konobeyev, B. I., Malyusov, V. A., and
Zhavoronkov, N. M., Corresponding Member of
the AN USSR

TITLE: Mass Exchange in Thin Liquid Films (Massoobmen v tonkikh
plenkakh zhidkosti).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 4, pp. 671-674 (USSR)

ABSTRACT: In some treatises (references 1-5) it has been proved that
the absorption speed of hardly soluble gases in tubes and
drains with wetted walls at little gas speeds (0,1-6 meters
per second) is independent of these speeds. The absorption
speed is only determined by the resistance of the mass
delivery in the liquid phase. The treatise discussed here
gives the results of the absorption of CO₂ by water in
vertical tubes at high gas speed, and with rising and
falling liquid currents. From the data in figure 1 and 2
we can conclude that the gas speed strongly influences the
absorption speed in falling liquid current. With rising
liquid current there is only little influence, and with
gas speeds of 11,5 to 39,0 meters per second it is rather
limited. The authors suppose that the absorption speed of

Card 1/4

On the Coefficient of the Separation of Mixtures Under High Vacuum Evaporation. 20-4-36/51

those of Khikman and Trevoy for α_M are, however, somewhat deeper for α_p . The authors are not able to explain these divergencies, except that in the case of Khikman and Trevoy a partial rectification took place. Figure 4 gives the dependence of α_M and α_p on the temperature. It is necessary to complete the method of measuring of the coefficients of separation. Nevertheless the results obtained in this paper are a confirmation of the rightness of the relation (8) at lower temperatures and of the fact that the relation α_M/α_p approaches the value 1 with the rise of temperature. There are 4 figures, and 5 references, 2 of which are Slavic.

ASSOCIATION: Physical-Chemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut im. L. Ya. Karpova)

SUBMITTED: May 30, 1957

AVAILABLE: Library of Congress

Card 3/3

On the Coefficient of the Separation of Mixtures Under High Vacuum Evaporation.

20-4-36/51

molecule has the same possibility of getting on either- the condenser- or the evaporation surface if these surfaces are equally great. In this case evaporation conditions occur which are similar to the equilibrium ones. They differ from the latter only by the fact that the evaporation takes place with a noticeable velocity, and the vapors can be seen as a distillate flowing down from the condenser. Formulae are given for ideal binary mixtures (Raoult Law) and for real mixtures. The relation derived for ideal as well as for real mixtures according to various computations lacks at present sufficient data as to be considered as established. The values α_M and α_P for the system di-2-ethyl-hexyl-phthalat- di-2-ethylexyl-sebacinate (in the further course abbreviated: EHPH and EHS) were measured by Khikman and Trevo (quotation 1). The results of their investigations do, however, not confirm the relation (8). The authors have measured the values α_M and α_P for the system dibutyl-phthalat- dibutyl-"aselaat" (DBPH and DBA) between 60 and 120°. Figure 1 gives the experimental results of a 50% -mixture of these substances in dependence on the temperature. Here the results are not contradicting to the theory. As the results did not correspond to those of Hickman and Trevo, the authors investigated the EHPH -EHS-mixture. The results given in figure 3 and 4 are closely agreeing to

Card 2/3

~~MALYUSOV~~ MALYUSOV, V. A.

20-4-36/51

AUTHORS:

Malyusov, V. A., Malofeyev, N. A., and
Zhavoronkov, N. M., Corresponding Member of the AN USSR

TITLE:

On the Coefficient of the Separation of Mixtures Under High
Vacuum Evaporation (O koeffitsiyente razdeleniya smesey pri
isparenii v vysokom vakuume)

PERIODICAL:

Doklady AN SSSR, 1957, Vol. 116, Nr 4, pp. 660 - 663 (USSR)

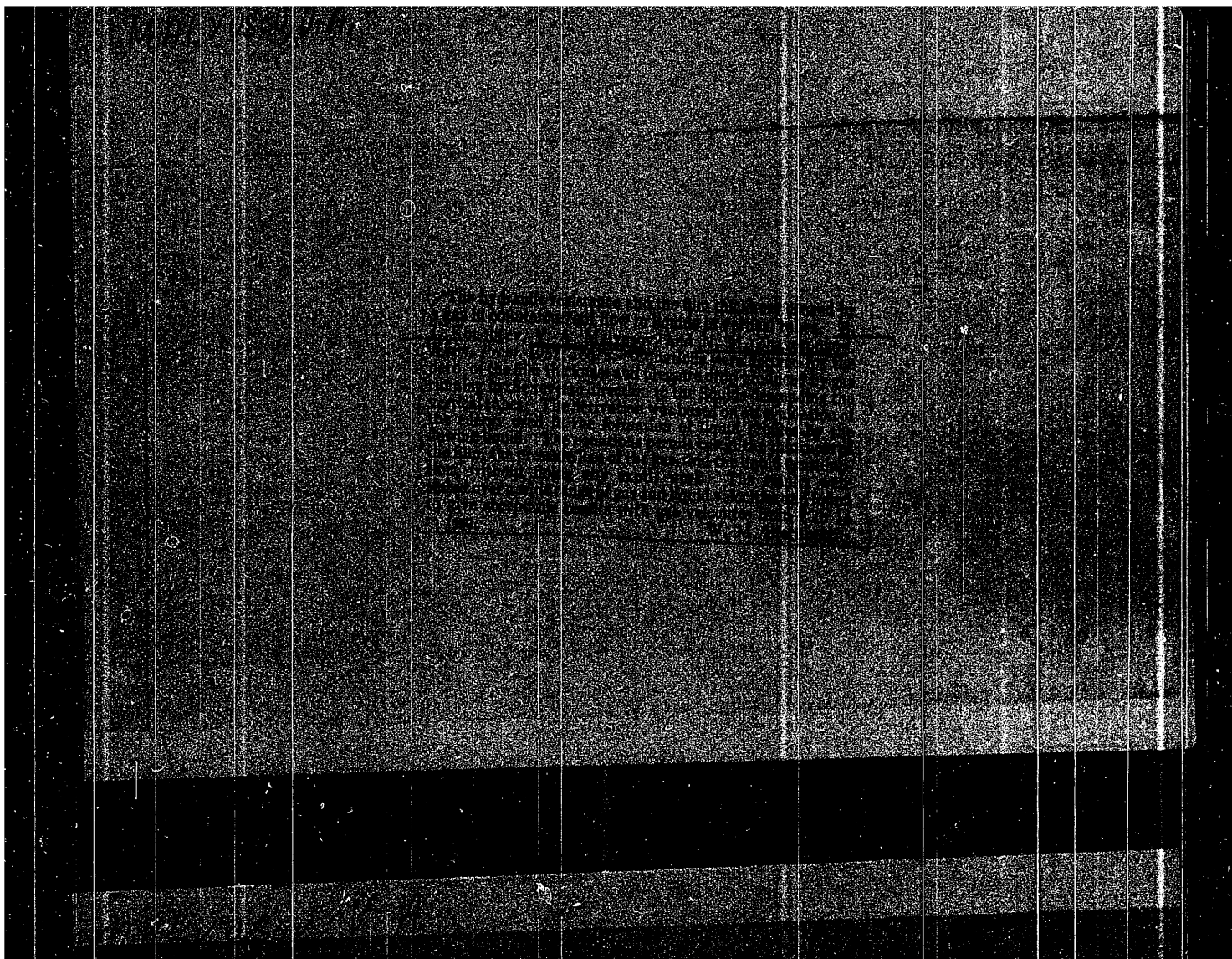
ABSTRACT:

The evaporation process in high vacuum can take place under equilibrium conditions, if all molecules return finally into the liquid phase after their separation from the evaporation surface in consequence of recoiling from the walls of the closed vessel and by the mutual collision; or, however, if all molecules reach the condensation surface and do not return. There is, however, in the molecular distillation a widely distributed case, when the length of the free path of the molecules (λ) is shorter than the distance between the condenser and the evaporator (h). Here a certain part of the evaporated molecules suffers a series of collisions on their way to the condenser and a portion of them returns to the evaporation surface. In the case of a considerable rise of temperature the length of the free path of the evaporated molecules decreases rapidly and the molecules move chaotically in the space between the evaporator and the condenser. Thus every

Card 1/3

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USSR/Processes and Equipment for Chemical Industries -
Processes and Apparatus for Chemical Technology

K-1

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 33268

It was found that by means of the apparatus utilized a complete separation of the I-II mixture, into practically pure components, is effected at reflux values close to the minimal. The III-IV mixture can not be completely separated by means of this apparatus; from the attained degree of separation the separation efficiency of the still was determined and evaluated as equal to 18.5 theoretical molecular plates; thus the average efficiency of the still is of 0.5. The advantages of the multi-step apparatus of the described design over other molecular stills are set out.

Malyusov, V.A.

K-1

USSR/Processes and Equipment for Chemical Industries -
Processes and Apparatus for Chemical Technology

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33268

Author : Malyusov, V.A., Umnik, N.N., Malafeyev, N.A., Zhavoronkov,
N.M.

Inst : Academy of Sciences USSR

Title : Molecular Rectification.

Orig Pub : Dokl. AN SSSR, 1956, 109, No 4, 828-831

Abstract : Description of a molecular rectification method for the separation of unstable mixtures into individual components. The experiments were conducted with a 37-step molecular still of the stairway type; the initial mixture was fed to the 19-th step of the apparatus. Separation was effected of the binary mixtures octoil - octoil S (I-II) and dibutyl phthalate - dibutyl azelate (III-IV). It was

Card 1/2

MALYUSOV, VA.
 USSR/Chemistry - Chemical technology

Card 1/1 Pub. 22 - 26/43

Authors : Mal'usov, V. A.; Umnik, N. N.; and Zhavoronkov, N. M., Memb. Corr.,
 AN SSSR

Title : Rectification in columns with a rotating rotor

Periodical : Dok. AN SSSR 106/1, 99-102, Jan 1, 1956

Abstract : The effect of basic rectification factors - rate of rotor rotation, rate of flow, physico-chemical properties of the mixture and geometric duct dimensions - on the rate of mass exchange in rectification columns was investigated with such mixtures as benzene-dichloroethane, benzene-carbon tetrachloride, chlorobenzene-ethylbenzene and ethyl alcohol-water. The results obtained are given in graphs. Ten references: 4 USSR, 4 Eng., and 2 USA (1938-1955). Table; graphs.

Institution : Scient. Res. Physicochemical Inst. im. L. Ya. Karpov

Submitted : July 1, 1955

MILYUSOV, V. A.

Mass exchange in the film rectification process.
 Turbulent flow. V. A. Milyusov, N. N. Ulanik, and N. M. Zhevolonkova. *Doklady Akad. Nauk SSSR*, 105, 1057-9 (1955); cf. preceding abstr. The C_6H_6 - $\text{C}_6\text{H}_5\text{Cl}$, C_6H_6 - CCl_4 , EtOH - H_2O , and the n - C_6H_{13} - $\text{C}_6\text{H}_5\text{CH}_3$ mixts. were distd. in columns 6.5, 10, and 22 mm. in diam. The app. used is illustrated. The exptl. results here recorded are in agreement with results of a no. of other investigators and can be satisfactorily expressed by the equation $h_{12}/d = 11.1 \cdot \text{Re}_g^{0.4} \cdot \text{Pr}_g^{0.33}$, for Re_g values between 1000 and 15,000, where d is the still diam., and Re_g and Pr_g are the Reynolds and Prandl nos. for the gas stream. W. M. S.

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Matyusov, V. R.

✓ Mass exchange in the film rectification process. Laminar
 vapor flow. V. A. Matyusov, N. N. Umnik, and N. M.
 Shadrunkov. *Doklady Akad. Nauk S.S.S.R.* 105, 770-81
 (1963). The original Westaver equation (cf. *C.A.* 36,
 1213) is modified to $h_e = 0.068 d Re Pr$, where h_e is
 the height of a mass transfer unit (which is not necessarily
 equal to the theoretical plate height, h , in the W. equation),
 d the tube diam., Re and Pr the Reynolds and the Prandtl
 nos. for gas. In expts. with the mixt. $C_6H_6-CCl_4$, C_6H_6 -
 CaH_2Cl_2 , H_2O-H_2O , and $n-C_4H_{10}-C_4H_9OH$, for Re values
 less than 1000, the exptl. data fall on a straight line, but the
 direction changes at $Re > 1000$, with the appearance of
 turbulent flow. W. M. Sternberg

3

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Sci Res. Physics-Chem Inst. im L. Ya. Karpov

Handwritten initials: RM

MALYUSOV, V. A.
USSR/Chemistry

Card 1/1 Pub. 22 - 23/40

Authors : Samokhvalov, G. I.; Miropol'skaya, M. A.; Vakulova, L. A.; Zhukova, L.P.; Slovookhotova, N. A.; Malyusov, V. A.; and Preobrazhenskiy, N. A.

Title : Aniontropic and prototropic regroupings during the synthesis of polyene compounds

Periodical : Dok. AN SSSR 99/2, 273-276, Nov 11, 1954

Abstract : Data on the aniontropic and prototropic regroupings, observed during the synthesis of polyene compounds, are presented. It was found that the reaction between beta-ionone and esters of gamma-bromocrotonic acid (Reformatsky reaction) results not only in the formation of hydroxy-carboxylic acid esters but also in the migration of the hydroxyl (aniontropic regrouping) toward the end of the conjugated system and consequent dehydration. The conditions under which the migration of the hydrogen (prototropic regrouping) and elongation of the chain of conjugated double bonds take place are discussed. The two tendencies of the prototropic regrouping are explained. Nine references: 3-USA; 3-USSR; 2-French and 1-Swiss (1946-1953). Graphs.

Institution : All-Union Scientific Research Vitamin Institute

Presented by : Academician I. L. Knunyants, June 25, 1954

MATROZOV, V.I., kandidat tekhnicheskikh nauk; PLANOVSKIY, A.N., professor,
retsenzent; MALYUSOV, V.A., kandidat tekhnicheskikh nauk, redaktor;
MODEL', B.I., tekhnicheskii redaktor

[Apparatus for molecular distillation] Apparatura dlia molekuliarnoi
distillatsii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi
lit-ry, 1954. 143 p. (MLRA 8:4)
(Distillation apparatus)

MALYUSOV, V. A.

MALYUSOV, V. A. - "Investigation of Mass Transfer in the Process of Film Absorption." Sub 3 Jul 52, Order of the Labor Red Banner Sci Res Physicochemical Inst imeni L.Ya. Karpov. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Vechernaya Moskva January-December 1952

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Catalytic oxidation of low concentrations of acetylene
V. G. Fastovskii and V. A. Malyshev. *J. Applied Chem.*
(U. S. S. R.) 13, 1590-81 (in French, 1951) (1947).--The
investigation was carried out for the purpose of developing
a method for the oxidation of minute amounts of C_2H_2 present
in equipment used for the rectification of liquid air and
causing explosions. Among the catalysts (com. MnO_2 ,
activated MnO_2 , electrolytic MnO_2 , NiO , CuO pptd. from
 $CuSO_4$ and two-component hopcalite) used, all except NiO
were found very active at 180-200° and vol. velocities of
3000-20,000. For the com. MnO_2 and pptd. CuO the
amt. of oxidation of C_2H_2 increases with increase in the
original concn. of C_2H_2 in the mixt. The apparent order
of the reaction for com. MnO_2 at 180-200° is below one;
it approaches the unimolecular type with increase in temp.,
evidently because of decreased adsorption of the reacting
gases by the catalyst. At 180° the apparent order of the
reaction increases with increase of the original concn.
The catalytic oxidation of C_2H_2 in the presence of CuO is
accompanied at 100-200° by a chemisorption of C_2H_2 with
the formation of the explosive CuC_2 ; at higher temps.
(250-300°) and low concns. of C_2H_2 (below 0.1%) forma-
tion of CuC_2 was not observed. Com. MnO_2 is recom-
mended as a catalyst for use in com. processes; the oxida-
tion should be effected at 200-250° and at a vol. velocity
of 3000-5000. Seventeen references. A. A. Borhtlingk

MALYUSOV, L.M.

Conference on automatized transmission devices. Tekst. prom. 19
no.11:96-97 N '59. (MIRA 13:2)

1. Nachal'nik energokontrolya fabriki imeni rabochego F. Zinov'yeva.
(Textile machinery--Electric driving) (Automatic control)

MAIYUSHITSKIY, Yu.N., kand. tekhn. nauk

Reconsideration of existing norms for exploring and planning strip
mines. Nauch. zap. Ukrniiproekta no.10:3-4 '63. (MIRA 17:6)

MALYUSHITSKIY, Yu.N., kand.tekhn.nauk

Method of laboratory studies and calculations of stable angles of
dump slopes. Nauch.zap.Ukrniiproekta no.5:14-20 '61. (MIRA 15:7)
(Strip mining) (Rocks--Testing)

MALYUSHITSKIY, Yu. N., kand. tekhn. nauk

Stability of the rims of deep pits. Nauch. zap. Ukrniiproekta no. 2:
19-38 '60. (MIRA 15:1)

(Strip mining)

~~MALYUSHITSKIY~~, Yuriy Nikolayevich; KUCHEROV, P.S., otvetstvennyy redaktor;
PECHKOVSKIY, V.I., redaktor izdatel'stva; RAKHLINA, N.P.,
tekhnicheskiy redaktor

[Factors affecting the stability of the sides of mine pits]
Uslovia ustoychivosti bortov kar'erov. Kiev, Izd-vo Akad.
nauk USSR, 1957. 268 p. (MLRA 10:6)

1. Chlen-korrespondent Akademii nauk USSR (for Kucherov)
(Mining engineering)

SOV/124-58-1-1042

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 137 (USSR)

AUTHOR: Malyushitskiy, Yu. N.

TITLE: On Calculation Schemes for the Rocky Slopes of Deep Open-cut Mines
(O raschetnykh skhemakh dlya skal'nykh otkosov glubokikh kar'yerov)

PERIODICAL: Sb. tr. In-ta gorn. dela. AN UkrSSR, 1956, Nr 4(13), pp 77-99

ABSTRACT: A survey, without critical evaluation, of a number of well-known calculation methods for the determination of the stress distribution and stability of the walls of open pits in rocky soils.

Reviewer's name not given

Card 1/1

MALYUSHITZKIY, Yu. N.

"Method of Calculating the Stability of the Earthen Slopes and Edges of Ditches,"

SO: Gor. Zhur., No. 6, 1949.

Cand. Technical Sci.

Mbr., Inst. Geological Sci., Dept Geol-Geog. Sci., Acad. Sci., -c1949-.

MALYUSHITSKIY, Ivan Pavlovich[Maliushyts'kyi, I.P.]; USAKOV,
I.O., dots., red.; KOVALENKO, M.Ya., red.; ANTONENKO,
T.S., red.

[Physical and colloid chemistry; colloid chemistry] Fi-
zychna i koloidna khimiia; koloidna khimiia. Kyiv, Ra-
dians'ka shkola, 1964. 182 p. (MIRA 18:1)

MALYUSHITSKIY, G.P., inzh.

Protection of electric systems from lightning. Elek.sta.

31 no.5:50-53 My '60. (MIRA 13:8)

(Lightning protection) (Electric lines)

(Electric substations)

MALYUSHITSKIY, G.P., inzh

Experience in operating 110 kv. electric power lines equipped with
coordinating struts. Elek.sta. 29 no.9:76-78 S '58.
(Electric lines--Poles) (MIRA 11:11)

91-58-5-15/35

Overdischarge of the 13.8 kv Winding of a Transformer

of electric arcs causing damage to the insulators. The transformer was switched off by action of the differential safety device. Metal parts of the insulators melted and the porcelain was burned so that the insulators had to be replaced. The over-discharges were caused by over-voltage on the without-load 13.8 kv winding. This over-voltage is calculated at 35-40 kv. Its cause is not known. Grounding of the without-load windings is recommended to avoid similar accidents. There is 1 figure.

AVAILABLE: Library of Congress

Card 2/2 1. Transformers - Discharge

AUTHOR: Malyushitskiy, G.P., Engineer

91-58-5-15/35

TITLE: Overdischarge of the 13.8 kv Winding of a Transformer (Perkrytiye obmotki 13.8 kv transformatora)

PERIODICAL: Energetik, 1958, Nr 5, pp 19-20 (USSR)

ABSTRACT: In the Gor'kiy Hydroelectric Power Station a group of three-phase transformers with a voltage of $\frac{246}{3} / \frac{121}{3} / 13.8$ kv

was put into operation. In the beginning, the transformer was connected with a load only on the 13.8 kv winding, as only one generator was in operation. The other 13.8 kv winding was left without load. Soon after the transformer had been put into operation, over-discharges were observed on the insulators of the latter 13.8 kv winding (without load). It was supposed that the overdischarges were due to locomotive smoke, which had reduced the discharge voltage of the insulators. During the over-discharges, no electrical arc formed and the transformer was not switched off. During repair work at a later time, the 110 kv winding and one of the 13.8 kv windings remained in operation. Some days later, overdischarges took place on the insulators of the without-load 13.8 kv winding with the formation

Card 1/2

MALYUSHITS'KA, M.I.

~~Adventive flora~~ in the city of Kiev. Nauk.zap.Kiev.un.
8 no.3:45-54 '49. (MLRA 9:10)

(Kiev--Botany)

MALYUSHITS'KA, M.I.

Wild grasses in the botanical garden of T.H. Shevchenko
State University in Kiev. Nauk.zap.Kiev.un. 7 no.6:85-97
'48. (MLRA 9:10)

(Kiev--Botanical gardens) (Grasses)

MALYUSHINA, Ye.P.

Detection of the tick *Ixodes trianguliceps* Bir. in Tyumen'
Province. Med. paraz. i paraz. bol. 32 no.3:355 My-Je'63

MALYUSHIN, A., mayor

Military builders of a "company of communist labor." Komm.
Vooruzh.Sil 2 no.10:62-65 My '62. (MIRA 15:5)
(Military engineers)

MALYUSEEV, A.P., prof., doktor tekhn. nauk

Kinematic and dynamic investigation of weft-laying mechanisms
used in Sulzer looms. Izv. vys. ucheb. zav.; mashinostr. no.10:
7-22 '58. (MIRA 12:11)

1. Moskovskiy tekstil'nyy institut.
(Looms) (Machinery, Kinematics of)

smoothness of machining of the rotor ducts has a substantial influence on friction.

Card 1/2

ACC NR: AT7005794

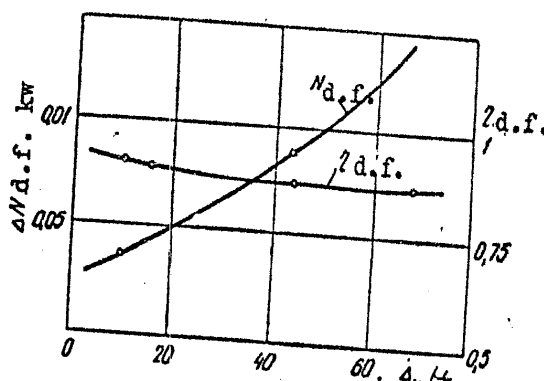


Fig. 1. Specific and relative disk-friction losses versus roughness

The optimal value of surface roughness is found to be 30--40 μ or $\nabla 4$ -- $\nabla 5$. Orig. art. has: 7 formulas and 4 graphs.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005

Card 2/2

L 2466-66

ACCESSION NR: AT5022821

ASSOCIATION: none

SUBMITTED: 00

NO REP BOV 005

ENCL: 00

OTHER: 001

SUB CODE: IE

ATD PRESS: 4106

BVK

Card 2/2

L 21/66-66

ACCESSION NR: AT5022821

UR/3165/65/000/001/0205/0212

AUTHOR: Malyushenko, V. V. (Engineer)

TITLE: Some criteria for obtaining stable forms of head characteristics of the stage of a centrifugal feed pump

SOURCE: Ukraine. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya. Gidravlicheskiye mashiny i gidroprivod, no. 1, 1965. Issledovaniye gidravlicheskiy ustroystv i sistem (Investigation of hydraulic devices and systems), 205-212

TOPIC TAGS: centrifugal feed pump, head characteristic, head characteristic stability

ABSTRACT: Pressure head characteristics of a centrifugal feed pump and the factors affecting the characteristics are discussed. It is stated that all modern pumps are designed with the aim of securing stable pressure-head characteristics. However, at the present, there are no theoretical methods for calculating various pump parameters which would secure these desired pressure-head characteristics. Based on published data for various pump parameters, an equation is derived which correlates various factors affecting the pressure-head characteristics, the loss coefficients, and the pump efficiency. Orig. art. has: 3 figures and 17 formulas. [PS]

Card 1/2

L 2696-66

ACCESSION NR: AT5022820

ENCLOSURE: 02

Fig. 1. Diagram of a stand for testing the working process of a stage of a centrifugal pump. 1 - experimental pump; 2 - suction pipe; 3 - water tank; 4 - regulating slide valve; 5 - measuring membrane; 6 - closed delivery pipe; 7 - auxiliary pump for balancing tests; 8 - device for the photography of the flow in the distributor; 9 - manometric shield for work with probes; 10 - battery mercury manometer for measuring static pressure distribution in the channels of the stage; 11 - standard spring manometer; 12 - mercury manometer; 13 - cupped differential mercury manometer for measuring the pressure drop on the membrane; 14 - ratiometer; 15 - pulse counter; 16 - electric pulse rotation rate sensor; 17 - device for the hydraulic measurement of the force on the beam of the motor balance; 18 - motor balance; 19 - resistance thermometer.

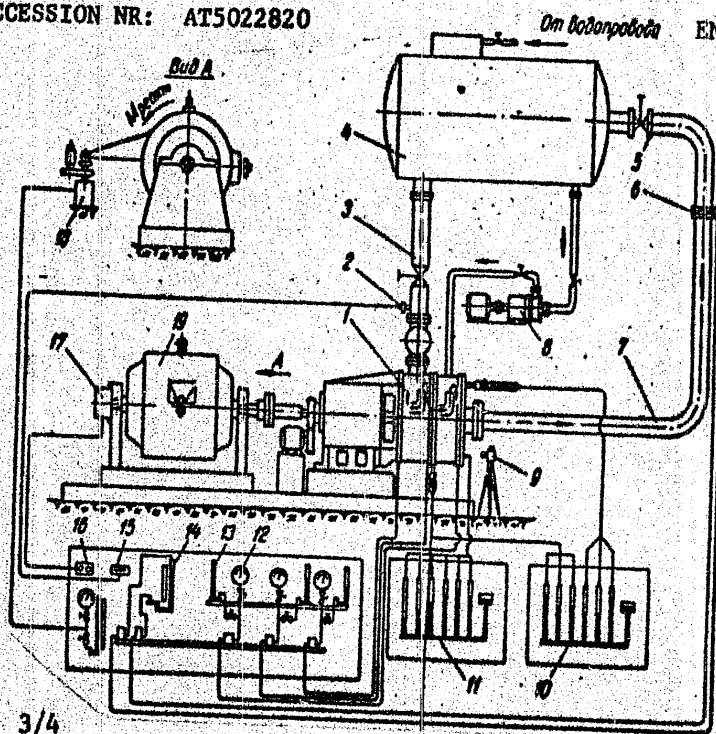
Card

KC
4/4

L 2696-65

ACCESSION NR: AT5022820

ENCLOSURE: 01



Card 3/4

L 2696-66

ACCESSION NR: AT5022820

4 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 02

SUB CODE: IE

NO REF SOV: 002

OTHER: 002

Card 2/4

L 2696-65 EWT(1)/EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/T/ETC(m) WW/DJ

ACCESSION NR: AT5022820

UR/3165/65/000/001/0193/0204

AUTHOR: Malyushenko, V. V. (Engineer)

40
S+1

TITLE: Experimental stand for testing the working process of a stage of a centrifugal pump

SOURCE: Ukraine. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya. Gidravlicheskiye mashiny i gidroprivod, no. 1, 1965. Issledovaniye gidravliches-kikh ustroystv i sistem (Investigation of hydraulic devices and systems), 193-204

TOPIC TAGS: test instrumentation, centrifugal pump, hydraulic pump, measuring instrument

ABSTRACT: A description is given of a test stand (see Fig. 1 of the Enclosure) which operates in a closed cycle. The design of the stand and the measuring methods described make possible the hydraulic investigation of a stage of a centrifugal pump to a sufficient accuracy with an insignificant expenditure of time and effort. This author is the first to use the design of the experimental pump (which makes possible direct measurements of the hydraulic force of the stage) for the investigation of pumps. The device designed for the hydraulic measurement of the force at the beam of the motor balance makes it possible to determine the torque in a wide range quickly and reliably. Orig. art. has:

Card

1/4

ALEKSAPOL'SKIY, D. A., kand. tekhn. nauk, dotsent; MALYUSHENKO, V.V., inzh.

Results of the study of the working parts of P-type feed pumps, conducted for purposes of modernization. Energomashinostroenie 11 no.6: 41-43 Je '65. (MIRA 18:7)

MALYUSHENKO, V. V., inzh.

Effect of the trimming of the rotor wheel of a sectionalized
feed pump. Energetik 12 no.4:20-22 Ap '64. (MIRA 17:7)

MALYUSHENKO, V.V., inzh.

Determination of the principal dimensions of the runners of feed
pumps with stable form of the pressure characteristic. Dergo-
mashinostroenie 10 no.10:5-8 0 '64 (MIRA 18:2)

ALEKSAPOL'SKIY, D.Ya., kand. tekhn. nauk, dotsent; MALYUSHENKO, V.V., inzh.

Effect of the $\frac{b_2}{D_2}$ ratio of the runner on the characteristics
of a feed pump stage. Izv. vys. ucheb. zav.; energ. 7
no.10:78-83 0 '64. (MIRA 17:12)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina.
Predstavleno kafedroy gidromashin.

ACCESSION NR: AP4034604

impeller:

$$\Delta H = 3,17 \frac{\psi n^2}{z} (D_2^3 \sin \beta_2 + D_1^3 \sin \beta_1) + \\ + 6,95 \cdot 10^{-6} \frac{Q^{1,75} z^{1,25} (D_2 - D_1) \left(\frac{\pi D_{cp}}{z} \sin \beta_{cp} + b_{cp} \right)^{1,25}}{\sin^4 \beta_{cp} \cdot b_{cp}^3 D_{cp}^3},$$

where ψ is the axial-vortex-friction factor, z is the number of blades, and Q is the pump capacity, m^3/sec . The above formula is to be represented graphically for z_{opt} determination and is claimed to be in much better agreement with the experimental z_{opt} than previous formulas. Orig. art. has: 4 figures, 18 formulas, and 1 table.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina
(Khar'kov Polytechnic Institute)

SUBMITTED: 06May63

DATE ACQ: 15May64

ENCL: 00

SUB CODE: PR.

NO REF SOV: 007

OTHER: 000

Card 2/2

ACCESSION NR: AP4034604

S/0143/64/000/004/0058/0065

AUTHOR: Malyushenko, V. V. (Engineer)

TITLE: Determining the optimum number of impeller blades in feed pumps

SOURCE: IVUZ. Energetika, no. 4, 1964, 58-65

TOPIC TAGS: pump, feed pump, turbine pump, centrifugal pump, pump impeller, pump impeller design

ABSTRACT: The optimum number of impeller blades determined from various formulas proposed in the literature on the subject differs widely (5 through 11 in one case). Optimum numbers computed from six formulas are tabulated for these pumps: 6V, VIGM; PE 500-180, VIGM; CCYV A-175 Ch55R "Sigma"; B-VQ-6-OHD "Sigma"; PE 600-300, SKB-PN; PE 500-180, SKB-PN; PEZ 20-200, SNZ; 5P7x7, SNZ; no. 4 impeller, KhPI; no. 5 impeller, KhPI. For comparison, the table gives experimentally determined optimum numbers. Keeping in mind that, in a real liquid flow, the friction largely determines the stream structure, and using some of the premises of the authors of other formulas, the present article proposes this new formula for the head drop in the

Card 1/2

MALYUSHENKO, V.V.

Device for measuring stresses in the lever of machine scales.
Mashinostroenie no.3:78 My-Je '63. (MIRA 16:7)

(Dynamometer)

HUNGARY

HARZA, Tibor, ~~MALYUSZ, Miklos~~, SZOCS, Eva; Medical University of Budapest, Institute of Physiology (Budapesti Orvostudományi Egyetem, Elettani Intézet).

"Method for the Determination of Inulin Clearance in the Rat Without Urine Collection."

Budapest, Kiserletes Orvostudomány, Vol XIX, No 1, Jan 67, pages 55-60.

Abstract: [Authors' Hungarian summary modified] It was established that, after the simultaneous administration of inulin in a Periston solution i.p., and in a physiological saline solution i.v., a steady blood inulin level is maintained between 1/2-3 1/2 hours. The amount of fluid in the abdominal cavity can also be considered constant during the experiment. Consequently the amount of inulin excreted can be calculated from the amount which disappears from the abdominal cavity. The average inulin clearance of rats under Evipan and Urethan anesthesia was also compared and it was found to be 0.560 ± 0.145 ml blood/min/100 g body weight and 0.39 ± 0.142 ml blood/min/100 g body weight, respectively. 1 Hungarian, 6 Western references. [Manuscript received 22 Feb 66.]

MALYUS-MALITSKIY, K.P.

JOURNAL

UNCLASSIFIED

Authors: M. A. Gurevich and K. P. Malys-Malitski

Title: Zhurnal Tekhnicheskoi Fiziki, September, 1954, Vol 24, No. 9, p 1724.

Translated Title: Journal of Technical Physics

Translated Title of Article: Self Recording Magneto-Electric Scales

Set 1/1, Card 1/1

AUTHORS' ABSTRACT: For uses in which the investigated specimen is not easily accessible (investigations in furnaces and reactors, etc.), for measuring low values of weight losses. Figures 1 and 2 show the design principle and the circuit of the "simple" scales. Figure 3 shows the circuit of the scales with differential recording. Weight losses of very low magnitudes can be measured and recorded.

Entire Abstract

vii
December 30, 1954

KOTEL'NIKOV, A.A. [Katsel'nikau, A.A.]; BEGUN, Z.A. [Biahun, Z.A.];
MALYUKOVICH, G.F. [Maliukovich, H.F.]

Röntgenokymographic characteristics of the contractile ability
of the heart muscle in experimental myocardial infarct. Vestsi
AN BSSR, Ser. biial. nav. no.4:80-84 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000034-6

BIDERMAN, V.L., doktor tekhn. nauk, prof.; MALYUKOVA, R.P., kand. tekhn. nauk

Stresses and deformations caused by a longitudinal impact. Rasch. na
proch. no.10:261-306 '64. (MIRA 18:1)

BADUSOV, A.A.; BELYAYEVA, N.P.; MALYUKOVA, N.P.

How we increased the indices of mechanical strength of
woodpulp. Bum. prom. 36 no.12:15-16 D '61. (MIRA 15:1)

1. Syas'skiy kombinat.
(Syas' region--Woodpulp)

KHANANASHVILI, M.M.; DALYKOVA, I.I.

Data for the analysis of complex unconditioned reflexes of
the maternity and labor in higher mammals. Zhur. vys. ser.
dat. 14 no. 3:498-502 My-Je '64. (MIR 12:11)

1. Pavlov Physiology Department, Institute of Experimental
Medicine, U.S.S.R. Academy of Medical Sciences, Leningrad.

MACYUKOVA, I.V.

Effect of electrical stimulation and partial coagulation of the prosencephalon and valvula cerebelli on conditioned food-procuring reflexes in fishes. Zhur. vys. nerv. deiat. 14 no.5:895-903 S=O '64. (MJRA 17:12)

1. Sechenov Institute of Evolutionary Physiology, U.S.S.R. Academy of Sciences, Leningrad.

KUPALOV, Petr Stepanovich [deceased]; VOYEVODINA, Ol'ga Nikolayevna;
VOLKOVA, Valentina Dmitriyevna; MALYUKOVA, Irina Vasil'yevna;
SELIVANOVA, Al'bina Timofeyevna; SYRENSKIY, Valeriy Ivanovich;
KHANANASHVILI, Mikhail Mikhaylovich; SHICHKO, Gennadiy
Andreyevich; BERKENBLIT, Z.M., red.

[Situational conditioned reflexes in normal dogs and in
pathology] Situatsionnye usloviye refleksy u sobak v norme i
patologii. Leningrad, Meditsina, 1964. 274 p.

(MIRA 17:8)

MALYUKOVA, I.V.

Effect of removal of the neocerebellum on situational conditioned reflexes in dogs. Zhur. vys. nerv. deiat. 13 no.6 1052-1058 N-3 '63. (MIRA 17:7)

1. Laboratoriya sravnitel'noy fiziologii tsentral'noy nervnoy sistemy Instituta evolyutsionnoy fiziologii imeni I.M. Sechenova AN SSSR i fiziologicheskiy otdel imeni I.P. Pavlova Instituta eksperimental'noy meditsiny AMN SSSR.

MALYUKOVA, I.V.

Effect of small doses of X rays on inhibition in the extinction stage in rabbits. Zhur. vys. nerv. deiat. 11 no.1:165-168 Ja-P '61. (MIRA 14:5)

1. Chair of Normal Physiology and Chair of Roentgenology and Radiology, Sanitary and Hygienic Medical Institute, Leningrad.
(INHIBITION) (X RAYS--PHYSIOLOGICAL EFFECT)

MALIYUKOVA, I.V.

Effect of repeated small doses of penetrating radiations on the
rheobase and chronaxy of muscles in rabbits. Fiziol.zhur. 45
no.11:1378-1383 N '59. (MIRA 13:5)

1. From the department of physiology and the department of roent-
genology and radiology, Medical Institute of Sanitation and
Hygiene, Leningrad.
(MUSCLES radiation eff.)

MALYUKOVA, I.V.

Change in conditioned responses in rabbits following injury
to hearing apparatus. Trudy ISMG 45:221-229 '58 (MIRA 11:11)

1. Kafedra normal'noy fiziologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. Yu.M. Uflyand)
i Kafedra Otolaringologii Leningraskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - zasluzhennyy deyatel' nauki, prof. K.L. Khilov).
(EAR--WOUNDS AND INJURIES)
(CONDITIONED RESPONSE)

ZUBZHITSKIY, Yu.N., MALYUKOVA, I.V., MANDEL'SHTAM, Yu.Ye.

In vivo study o the sensitivity of nerve cell protoplasm to
novocaine . Trudy LSGMI 45:172-183 '58 (MIRA 11:11)

1. Kafedra obshchey biologii Leningradskogo sanitarno-gigiyeni-
cheskogo meditsinskogo instituta (zav. kafedroy - chlen-korrespondent
AMN SSSR, prof. P.V. Makarov).
(NERVES)
(NOVOCAINE)

USSR/Human and Animal Physiology (Normal and Pathological) T
The Effect of Physical Factors. Ionizing Irradiation

Abs Jour : Ref Zhur Biol., No 6, 1959, 27206

Author : Malyukova, I.V.

Inst : Leningrad Medical Institute of Sanitation and Hygiene.
The Influence of Small Doses of X-Rays on Extinguishing
Inhibition in Mice.

Orig Pub : Tr. Leningr. san.-gigiyen. med. in-ta, 1958, 44, 342-
349

Abstract : No abstract.

Card 1/1

MALYUKOVA, I. V.: Master Med Sci (diss) -- "The effect of general repeated irradiation with small doses of penetrating radiation on the process of cortical inhibition in certain animals". Leningrad, 1958. 20 pp (Min Health RSFSR, Leningrad Sanitary-Hygiene Med Inst), 200 copies (KL, No 2, 1959, 125)

TESNEK, Yuriy Ivanovich; MALYUKOVA, G.S., nauchn. red.

[Magnetic measurements] Magnitnye izmereniia. Moskva,
TSentr. nauchno-issl. in-t patentnoi informatsii i
tekhniko-ekon. issl., 1964. 39 p. (MIRA 18:6)

MALYUKOVA, F.S.; SURKOVA, L.I.

Determining the bromine numbers of organosilicon compounds
containing unsaturated radicals. Plast. massy no. 12:51-52
'65 (MIRA 19:1)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000034-6

MALYUKOVA, A. A.

The Ice Cycle of the Bays and Gulfs of the Murmansk Coast and the
Southeastern Coast of the Barents Sea.
Works of the GOIN, No. 2, 1947 (35-57)

GOLUBEV, N.I., prof.; MALYUKOV, Ye.I., assistant; SEMIROTOVA, O.N., vrach

Visceral reflexes of the stomach and duodenum. Sbor. nauch. rab.
Sar. gos. med. inst. 44:177-181 '64. (MIRA 18:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. N.I. Golubev) pediatricheskogo fakul'teta Saratovskogo meditsinskogo instituta (rektor - dotsent N.R. Ivanov) na baze dorozhnoy klinicheskoy bol'nitsy Privolzhskoy zheleznoy dorogi (nachal'nik - R.F. Nazarenko).

GOLUBEV, N.I., prof.; MALYUKOV, Ye.I., assistant; KHARETONOV, I.B., assistant

Inferior median extraperitoneal access in surgery on the
retroperitoneal space. Sbor. nauch. rab. Sar. gos. med. inst.
44:50-61 '64. (MIRA 18:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. -- prof. N.I. Golubev) pediatricheskogo fakul'teta Saratovskoygo meditsinskogo instituta (rektor -- dotsent N.R. Ivanov) na baze dorozhnoy klinicheskoy bol'nitsy Privolzhskoy zheleznoy dorogi (nachal'nik -- R.F. Nazarenko).

MALYUKOV, Ye.I., assistant

Closing the stump of the duodenum; analysis of clinical material.
Sbor. nauch. rab. Sar. gos. med. inst. 44:28-33 '64.

Inflammatory tumors of the cecum following removal of the vermiciform
process. Ibid.:158-165 (HIRA 18:7)

1. Iz kafedry fakul'tetskoy khirurgii (zav. kafedroy prof. M.I. Golubev) pediatricheskogo fakul'teta Saratovskogo meditsinskogo instituta (rektor - dotsent N.R. Ivanov) na baze dorozhnoy klinicheskoy bol'nitsy Pervolzhskoy zhelodchnoy serogi (nachal'nik - R.F. Nazaretskiy).

GOLOBEV, N.I., prof.; MALUKOV, Ye.I., assistant

New method of closing the stump of the duodenum in gastroduodenal resections. Sber. nauch. rab. Sar. gos. med. inst. 41:127-128, 1971.

Effect of vagotomy and section of the left gastric artery on the arterial pressure in gastrectomy. Ibid.:182-187

Reflexogenic zone in the pancreas area. Ibid.:187-189

Visceral reflexes of the vermiform process. Ibid.:189-191

(MIRA 18:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki pediatricheskogo fakul'teta (zav. - prof. N.I. Golubev) Saratovskogo meditsinskogo instituta (rektor - N.B. Ivanov) na baze Borzhnnoy klinicheskoy bol'nitsy Privolzhskoy zheleznoy dorogi (nachal'nik - R.F. Mazarenko).

MALYUKOV, V.M., assistant

Effect of antitumoral drugs on the metabolism and fermentation
processes in persons suffering from malignant neoplasms. Trudy
Khar. med. inst. no.52:26-30 '59. (MIRA 14:11)
(CANCER) (METABOLISM)

MALYUKOV, V.M.; GATSKO, A.A.

Poisoning caused by an infusion of Spanish fly. Vrach.delo no.10:
107-108 O '60. (MIRA 13:11)

1. Kafedra gospital'noy terapii (zav. - prof. R.I.Sharlay [deceased])
lechebnogo fakul'teta Khar'kovskogo meditsinskogo instituta.
(CANTHARIDES--TOXICOLOGY)

SHARLAY, R.I., prof.; MALYUKOV, V.M., ~~hand.med.nauk~~; DENISOVA, V.F.

Use of neocide in the treatment of malignant neoplasms. Trudy
Khar. med. inst. no.52:17-25 '59. (MIRA 14:11)
(ETHANE) (CANCER)

MALYUKOV, V. M.

"Data Concerning the Binding of Ascorbic Acid by Proteins of Blood Serum," by V. M. Malyukov, Tr. Khar'kovsk. Med. In-ta, Vol. 35, 1955, pp 55-56 (from Referativnyy Zhurnal -- Khimiya, Biologicheskaya Khimiya, No 20, 25 Oct 56, p 28, Abstract No 18952)

"Studies were conducted to see whether ascorbic acid was bound by blood serum proteins. On the addition of ascorbic acid to preserved serum of the blood of horses and to fresh serum of the blood of dogs, ascorbic acid was decreased by 3.6-9.2 mg % as compared with experiments in which the proteins of the serum had been previously precipitated.

The author thinks that the decrease in the amount of ascorbic acid indicates its being bound by proteins of blood serum and was not due to oxidation because analogous results were obtained in CO₂ atmosphere."

Sum 1274

MALYUKOV, V. M.

MALYUKOV, V. M. -- "Aspects of Higher Nervous Activity in Patients with Hypertonic Disease." Khar'kov State Medical Inst. Khar'kov, 1955. (Dissertation for the Degree of Candidate of Medical Sciences.)

SO: Knizhnaya Letopis', No 5, Moscow, Feb 1956

L 27380-66

ACC NR: AP6015242

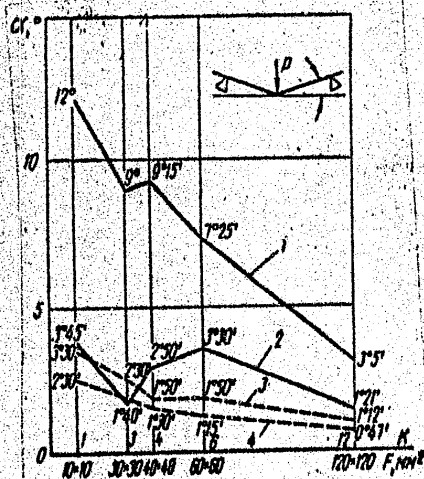


Fig. 1. Effect of the size factor on the bend angle of avial-type alloy base metal in the heat-treated condition (1) and aged at 130C for 200 hr (2); and in as-welded alloy welds (3) aged at 130C for 200 hr (4).

dropped. The values of bend angle in welded specimens were much lower than in base metal (see Fig. 1). Aging at 100 C for 1000 hr brings about a further drop in the ductility of welded specimens. After this treatment they failed in a brittle manner. Orig. art. has: 5 figures and 3 tables. [AZ]

SUB CODE: 11, 13/ SUBM DATE: 25May65/ ORIG REF: 005/ ATD PRESS: 4259

Card 2/2

L 27380-66 EWT(m)/EWA(d)/ENP(v)/I/ENP(t)/ETI/ENP(L) IJP(s) ID/HM/JH
 ACC NR: AP6015242 (A) SOURCE CODE: UR/0125/66/000/005/0016/0019

AUTHOR: Kiselev, S. N. (Moscow); Khovanov, V. A. (Moscow); Malyukov, V. A. (Moscow);
 Skorniyakov, L. M. (Moscow); Matyunina, A. T. (Moscow)

ORG: none

TITLE: Mechanical properties of heavy welded avial-type alloy specimens

SOURCE: Avtomaticheskaya svarka, no. 5, 1966, 16-19

TOPIC TAGS: aluminum alloy, alloy weld, weld property, avial alloy

ABSTRACT: The effect of the size factor on the mechanical properties of heat-treatable avial-type aluminum-base alloy (0.74—0.90% Si, 0.59—0.70% Mg) welds and base metal has been studied. Specimens 10x10x100, 30x30x450, 40x40x500, 60x60x600, and 120x120x1000 mm (respective size factors 1, 3, 4, 6 and 12) were made from plates 40, 70, 90, 220 and 330 mm thick. Welding was done with a consumable SvAK-5 electrode in an argon-helium atmosphere. The base metal in the heat-treated condition (annealing and aging) had a tensile strength of 20—25 kg/mm², a yield strength of 10—14 kg/mm², and an elongation of 20—25%; corresponding figures for welded specimens were 16—19 kg/mm², 8—10 kg/mm², and 10—12%. Fracture in most cases was in the weld. Bend tests (on specimens with the Charpy-type notch) showed that with increasing size factor, the bend angle (measured at the appearance of the first crack)

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was 30—35 l/min, and the He consumption was 50—60 l/min. The welding speed varied from 11.5 to 18.2 m/hr, and the number of passes was 6, 12—14, and 26—28 for plates 40, 80, and 140 mm, respectively. Welding with 4-mm electrode wire produced the least porous weld metal. Prior to heat treatment, the hardness of the heat-affected zone in 40-mm plates decreased by 15—18 HB compared with the parent metal, with the maximum decrease taking place at a distance of 12—15 mm from the fusion line. The corresponding figures for 80-mm plates were 10—12 HB and 8—10 mm, and for 140-mm plates, 5—8 HB and 5—6 mm. Subsequent heat treatment leveled to some extent the mechanical properties of the metal in the heat-affected zone, but did not improve them in the weld metal. Development of special electrode wire for welding SAB-1 type alloys is recommended to obtain welded joints which, after heat treatment, would have the strength of the parent metal. Orig. art. has: 5 figures and 3 tables. [MS]

ASSOCIATION: none

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ENCL: 00

OTHER: 001

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ATD PRESS: 4068

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L 00996-66 EMT(a)/EPA(s)-2/EMT(m)/EMP(w)/EWA(d)/EMP(v)/T/EMP(t)/EMP(k)/EMP(z)/
 EMP(b)/EWA(o) TJP(a) EM/MJW/JD/HM UR/0125/65/000/007/0044/0047
 ACCESSION NR: AP5018699 621.791.856:669.715 46

AUTHOR: ⁵⁵Kiselev, S. N. (Engineer) (Moscow); ⁵⁵Khovanov, V. A. (Engineer) (Moscow); ⁵⁵Skornyyakov, L. M. (Engineer) (Moscow); ⁵⁵Malyukov, V. A. (Engineer) (Moscow); 13

TITLE: ⁵⁵Welding thick plates of SAB-1 aluminum alloy

SOURCE: ^{44, 16}Avtomaticheskaya svarka, no. 7, 1965, ^{55, 21}44-47

TOPIC TAGS: aluminum alloy, aluminum alloy thick plate, thick plate welding, edge groove geometry, welding electrode, weld metal property, heat treatment effect

ABSTRACT: Experiments have been made to develop an improved technique for welding thick plates of SAB-1 aluminum alloy, an age-hardenable alloy of the Al-Mg-Si system with Si:Mg > 1. Plates, 40, 80, and 140 mm thick, of SAB-1 alloy containing 0.81% Si and 0.48% Mg were inert-gas arc welded with a consumable electrode of the SvAK-5 type, 2, 4, or 5 mm in diameter, using a mixture of 30-40% Ar and 60-70% He for arc shielding. The use of helium made it possible to increase the temperature of the molten metal pool, to raise the voltage, and to ensure good weld formation. The best groove geometry was a double-V without root opening. In the experiments, the welding current was 450-520 amp, the arc voltage was 29-32 v, the Ar consumption

Card 1/2

1. MALYUKOV, N.P., MEYTUS, M.E.
2. USSR (600)
4. Geology and Geography
7. Principles of Engineering Geology, N. P. Malyukov and M.E. Meytus. (Moscow, Highway Press, 1947). Reviewed by A. V. Yefrenova, Sov. Kniga, No. 1, 1948.
9. ~~Report~~ Report U-3081, 16 Jan. 1953, Unclassified.

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000034-6

X-ray absorption spectra. Zhur. strukt. khim. 5 no.4:602-
610 Ag '64. (MIRA 18:3)

I. Institut mineralogi, geokhimi i kristalloghimi redkikh
elementov.

KHRAPACH, Grigoriy Kuz'mich; MALYUKOV, G.A., red.; RASTOVA, G.V.,
ved. red.

[Installation and repair of compressors] Montazh i remont
kompressorov. Moskva, Izd-vo "Nedra," 1964. 479 p.
(MIRA 17:5)

BARTINSKIY, R.I.; SHVELASHVILI, A.Yo.; MALYUKOV, B.A.

Study of the K-absorption spectra of nickel in diacidostiguer-
diamine compounds as a preliminary step in solving crystal
structures of these compounds. Zhur. strukt. khim. 5 no.3:
497-500 My-Je '64. (MIRA 18:1)

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elementov.

ACCESSION NR: AP4038766

ASSOCIATION: Institut mineralogi, geokhimi i kristallokhimi redkikh elementov
(Institute of Mineralogy, Geochemistry and Crystallochemistry of Rare Elements)

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DATE ACQ: 12Jun64

ENCL: 00

SUB CODE: OP

NR REF SOV: 004

OTHER:000

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ACCESSION NR: AP4038766

ment with a conclusion previously drawn from the sulfur spectra (loc.cit supra). A second absorption line was present. This is ascribed to the partly forbidden transition of the K electron to a d state of the exciton. Both the solid state and the solution spectra of KClO_3 indicated an effective charge of 0.7 on the chlorine ion. The width of the first absorption line in the solid was 1.3 eV. In the solution, the first absorption line was double, with the low intensity component about 1 eV on the high energy side. Otherwise the two spectra were very similar. Stark effect calculations considering only the three oxygen atoms in the ClO_3^- ion are said to predict a smaller separation and a displacement in the opposite direction than observed. The assumption that an oxygen atom from the solvent approaches the chlorine ion on its unprotected side, however, is said to lead to agreement with the experiment. The two LiClO_4 spectra, solid and solution, were identical within the experimental error. The first absorption line in both cases was 0.8 eV wider than in the gaseous spectra. In the solid state this broadening can be ascribed to the influence of the lattice. In the solution the broadening must be ascribed to solvation. The mechanism is unclear, however, since there is no "unprotected side" of the Cl ion in ClO_4^- , and no estimate of the effect of solvation is submitted. Orig.art.has: 4 figures.

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S/0048/64/028/005/0805/0808

AUTHOR: Barinskiy, R.L.; Malyukov, B.A.

TITLE: Stark effect in the K absorption spectra of chlorine compounds Report,
Seventh Conference on X-Ray Spectroscopy held in Yerevan 23 Sep-1 Oct 1963

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.5, 1964, 805-808

TOPIC TAGS: x-ray spectrum, x-ray absorption, chlorine, chlorine compound, Stark effect

ABSTRACT: The chlorine K absorption spectra were recorded for $C_2H_4Cl_2$, SO_2Cl_2 and $SOCl_2$ in the gaseous state and for $CKlO_3$ and $LiClO_4$ in both the solid state and in 2N aqueous solutions. All experimental details except the construction of the absorption cell for the solutions are described elsewhere (R.L.Barinskiy, B.A.Malykov, Izv.AN SSSR,Ser.fiz.26,412,1962). The absorption cell was a sandwich of three thin films held together by the surface tension of the solution. A 4 mm opening in the central film constituted the cell proper and provided a 20 micron path. Six to eight hour exposures were required with 100 mA and 5.6 kV on the x-ray tube. The gaseous spectra indicated a small charge (approximately -0.1) on the chlorine ion, in agree-

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